WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health
231, de Saram Place, Colombo 01000, Sri Lanka
Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk
Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk
Web: http://www.epid.gov.lk

Vol. 42 No. 10 **28th – 06th March 2015**

SRI LANKA - 2015 WER

Pneumococcal Disease

Streptococcus pneumoniae bacteria, or pneumococcus, can cause many types of illnesses. Some of which can be life-threatening.

You have probably heard of pneumonia, which is an infection of the lungs. Pneumonia can be caused by many different bacteria, viruses, and even fungi. Pneumococcus is one of the most common causes of severe pneumonia.

Besides pneumonia, pneumococcus can cause other types of infections too, such as:

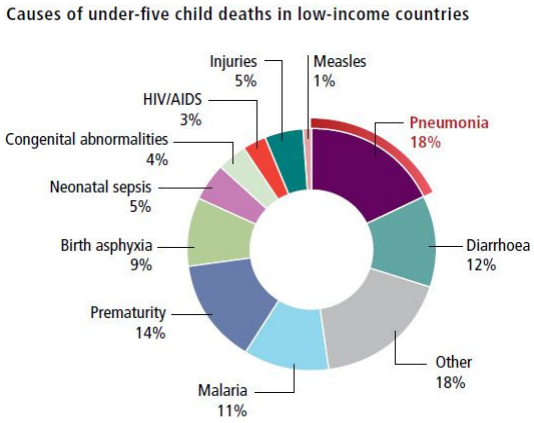
- Ear infections
- Sinus infections
- Meningitis (infection of the covering around the brain and spinal cord)
- Bacteremia (blood stream infection)

Out of over 90 serotypes, only a small minority cause most disease.

Some of these infections are considered "invasive." Invasive disease means that germs invade parts of the body that are normally free from germs. For example, pneumococcal bacteria can invade the bloodstream, causing bacteremia, and the tissues and fluids surrounding the brain and spinal cord, causing meningitis. When this happens, disease is usually very severe, causing hospitalization or even death.

Epidemiology

Pneumonia is the most common form of serious pneumococcal disease and accounts for 18 %of child deaths in developing countries, making it one of the two leading causes of death among young children.



-Causes of under 5 child deaths in low-income countries-

What are the risk factors?

For Children:-

- Younger than 2 years of age
- In group child care
- Who have certain illnesses (sickle cell disease, HIV infection, and chronic heart or lung conditions)
- With cochlear implants or cerebrospinal fluid (CSF) leaks (escape of the fluid that surrounds the brain and spinal cord)

For Adults:-

Adults 65 years of age and older are at increased risk for pneumococcal disease.

Some adults 19 through 64 years of age are also at increased risk for pneumococcal disease, including those:

Contents *Page*

- With chronic illnesses (lung, heart, liver, or kidney disease; asthma; diabetes; or alcoholism)
- With conditions that weaken the immune system (HIV/AIDS, cancer, or damaged/absent spleen)
- Living in nursing homes or other long-term care facilities
- With cochlear implants or cerebrospinal fluid (CSF) leaks (escape of the fluid that surrounds the brain and spinal cord)
- Who smoke cigarettes

Transmission

Pneumococcal bacteria spread from person-to-person by direct contact with respiratory secretions, like saliva or mucus. Many people, especially children, have the bacteria in their nose or throat at one time or another without being ill. This is called "carriage."

Pneumococcal vaccines

There are 2 available pneumococcal conjugate vaccines (PCV) that target either 10 or 13 of the most prevalent serotypes. Currently available PCVs are safe and efficacious. WHO recommends the inclusion of PCVs in childhood immunization programmes worldwide. In particular, countries with high childhood mortality (i.e. under 5 mortality rate of >50 deaths/1000 births) should make the introduction of these multicomponent PCVs a high priority.

Pneumococcal conjugate vaccine (PCV13) is recommended for all children younger than 5 years old, all adults 65 years or older, and people 6 years or older with certain risk factors.

Pneumococcal polysaccharide vaccine (PPSV23) is recommended for all adults 65 years or older. People 2 years through 64 years of age who are at high risk of pneumococcal disease should also receive PPSV23.

Who should not get the vaccine?

PCV13 (Pneumococcal Conjugate) vaccine

Some children should not get PCV13 or should wait.

Anyone who has had a life-threatening allergic reaction to a dose of this vaccine, to an early pneumococcal vaccine called PCV7 (or Prevnar), or to any vaccine containing diphtheria toxoid (for example, DTaP) should not get PCV13.

Anyone with a severe allergy to any component of PCV13 should not get the vaccine. Tell your doctor if the person being vaccinated has any severe allergies.

PPV23 (Pneumococcal Polysaccharide) vaccine

Some people should not get PPSV or should wait:

- Anyone who has had a life-threatening allergic reaction to PPSV should not get another dose.
- Anyone who has a severe allergy to any component of a vaccine should not get that vaccine. Tell your provider if you have any severe allergies.
- Anyone who is moderately or severely ill when the shot is scheduled may be asked to wait until they recover before getting the vaccine. Someone with a mild illness can usually be vaccinated.

Although there is no evidence that PPSV is harmful to either a pregnant woman or to her foetus, as a precaution, women with conditions that put them at risk for pneumococcal disease should be vaccinated before becoming pregnant, if possible.

The burden of pneumococcal disease is substantially higher among individuals who are infected with HIV. Since pneumococcal conjugate vaccines have been shown to be safe and efficacious in HIV-infected children, WHO recommends prioritizing the introduction of PCV-7 in countries where HIV is a significant cause of mortality.

Sources:

Pneumococcal Vaccination, available at *http://www.cdc.gov/vaccines/vpd-vac/pneumo/default.htm?s_cid=cs_797*

Pneumococcal disease, available at *http://www.who.int/immunization/diseases/pneumococcal/en/*

Pneumococcal fact sheet, available at *http://www.gavi.org/library/publications/gavi-fact-sheets/factsheet--pneumococcal-disease/*

Compiled by Dr. C U D Gunasekara of the Epidemiology Unit

Table 1: Selected notifiable diseases reported by Medical Officers of Health 21st – 27th Feb 2015 (09th Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmaniasis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	192	2849	4	39	1	3	2	15	0	13	3	37	0	1	1	13	0	1	2	70	0	3	0	0	**88**	**13**
Gampaha	24	1222	0	16	0	2	0	5	0	3	8	55	0	2	1	33	0	0	1	34	0	3	0	0	**27**	**73**
Kalutara	41	453	3	22	1	2	0	12	3	9	4	58	0	0	0	7	0	1	13	51	0	6	0	0	**77**	**23**
Kandy	5	380	0	33	0	0	0	9	0	1	1	14	0	17	0	49	0	0	2	62	0	3	0	1	**17**	**83**
Matale	21	258	2	17	0	0	0	3	2	2	1	15	0	1	2	9	0	0	2	3	0	2	1	3	**77**	**23**
NuwaraEliya	7	60	2	52	1	1	1	4	0	0	0	6	0	13	0	23	0	0	0	12	3	13	0	0	**77**	**23**
Galle	18	256	1	18	0	0	0	2	0	6	5	50	2	16	0	2	0	0	2	47	0	13	0	0	**80**	**20**
Hambantota	14	96	1	6	0	0	0	4	0	0	1	18	1	10	1	11	0	0	3	17	0	2	0	43	**67**	**33**
Matara	16	127	3	15	0	0	0	2	0	19	6	34	2	11	0	7	0	0	10	54	0	7	1	16	**100**	**0**
Jaffna	41	832	12	144	1	7	9	86	1	11	0	7	34	373	1	6	0	0	4	36	1	2	0	0	**92**	**8**
Kilinochchi	5	29	4	20	0	0	1	3	0	25	0	0	0	4	0	0	0	0	0	5	0	0	0	0	**75**	**25**
Mannar	4	65	0	2	0	0	0	4	0	1	0	8	3	10	0	0	0	0	0	0	0	0	0	0	**80**	**20**
Vavuniya	3	47	0	6	1	4	1	7	0	2	0	8	0	8	0	1	0	0	2	4	0	0	0	0	**100**	**0**
Mullaitivu	0	48	1	7	0	1	0	1	0	1	0	2	0	4	0	0	0	0	0	1	0	1	0	2	**20**	**80**
Batticaloa	58	645	1	38	0	2	0	1	0	0	0	1	0	0	0	0	0	0	3	9	2	5	0	0	**79**	**21**
Ampara	1	15	0	13	0	0	0	0	0	0	1	4	0	0	0	0	0	0	2	42	0	3	0	0	**57**	**43**
Trincomalee	35	220	2	8	0	0	1	10	0	22	0	4	0	2	0	0	0	0	1	7	0	1	0	0	**83**	**17**
Kurunegala	46	490	4	39	1	2	0	3	0	0	6	65	2	10	1	10	0	0	9	90	0	4	4	20	**85**	**15**
Puttalam	8	332	0	11	0	0	0	1	1	1	1	16	0	5	0	1	0	0	1	12	1	5	0	0	**62**	**38**
Anuradhapura	6	187	0	17	0	0	0	0	21	26	2	74	1	6	1	5	0	0	6	30	0	9	0	39	**68**	**32**
Polonnaruwa	12	94	3	12	0	1	1	4	0	0	2	32	0	1	0	2	0	0	4	31	1	10	3	18	**86**	**14**
Badulla	17	252	5	38	1	1	0	2	1	4	3	11	1	19	3	28	0	0	4	26	2	11	2	3	**65**	**35**
Monaragala	4	71	3	33	1	1	0	5	0	2	4	60	0	18	1	10	0	0	0	20	0	4	0	6	**82**	**18**
Ratnapura	8	275	4	76	0	3	0	8	0	1	12	67	0	16	7	95	0	0	6	13	0	8	0	3	**72**	**28**
Kegalle	6	159	3	19	0	2	0	21	0	0	5	49	1	8	2	26	0	0	6	40	0	9	0	0	**82**	**18**
Kalmune	11	304	0	31	0	0	0	0	0	11	0	1	0	0	0	0	0	0	1	32	0	2	0	0	**62**	**38**
SRILANKA	**603**	**9766**	**58**	**732**	**8**	**32**	**16**	**212**	**29**	**160**	**65**	**696**	**47**	**555**	**21**	**338**	**0**	**2**	**84**	**748**	**10**	**126**	**11**	**154**	**71**	**29**

Source: Weekly Returns of Communicable Diseases (WRCD).

*T=Timeliness refers to returns received on or before 27th February , 2015 Total number of reporting units 337 Number of reporting units data provided for the current week: 241 C**-Completeness

Table 2: Vaccine-Preventable Diseases & AFP

21st – 27th Feb 2015 (09th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2015	Number of cases during same week in 2014	Total number of cases to date in 2015	Total number of cases to date in 2014	Difference between the number of cases to date in 2014& 2015
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	00	00	00	00	00	00	00	00	04	10	16	-37.5%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	%
Mumps	00	00	04	02	00	02	01	00	00	09	10	70	149	-53.0%
Measles	17	01	05	00	00	02	01	03	00	29	70	273	815	-66.5%
Rubella	00	00	00	00	00	00	00	00	00	00	00	04	01	+300%
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	00	%
Tetanus	00	00	00	00	00	00	00	00	00	00	00	02	02	%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	%
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	00	03	16	-81.2%
Whooping Cough	01	00	00	00	00	00	00	00	00	01	00	16	09	+78.1%
Tuberculosis	116	37	33	07	18	00	00	20	20	251	249	1699	2052	-17.2%

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

RDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS** =Congenital Rubella Syndrome

AFP and all clinically confirmed Vaccine Preventable Diseases except Tuberculosis and Mumps should be investigated by the MOH

Dengue Prevention and Control Health Messages

Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them

PRINTING OF THIS PUBLICATION IS FUNDED BY THE WORLD HEALTH ORGANIZATION (WHO).

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

ON STATE SERVICE

Dr. P. PALIHAWADANA
CHIEF EPIDEMIOLOGIST
EPIDEMIOLOGY UNIT
231, DE SARAM PLACE
COLOMBO 10